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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,543	04/08/2004	Deshitha Airawana Edirisuriya	1171/40711A/127A-CIP	8375

279 7590 01/11/2008  
Trexler, Bushnell, Giangiorgi,  
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EXAMINER
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WOLLSCHLAGER, JEFFREY MICHAEL

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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01/11/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/820,543	<b>Applicant(s)</b> EDIRISURIYA ET AL.	
	<b>Examiner</b> Jeff Wollschlager	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 6-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 19, 2007 has been entered.

### ***Response to Amendment***

Applicant's amendment filed October 19, 2007 has been entered. Claims 6-9 are currently amended. Claim 10 is new. Claims 1-5 have been canceled.

### ***Claim Objections***

Claim 7 is objected to because of the following informalities: there are two periods at the end of the sentence. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limiting effect of "the inner part of said cuff extends from said connector" is unclear. It is unclear what is required for the inner part of the cuff to be reasonably considered to "extend from said connector".

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Vohrer (DE 202 11 150; published September 26, 2002).

All citations to Vohrer in the rejection are from the US equivalent patent US 6,971,414.

Regarding claims 6 and 7, Vohrer teaches a method of forming a connector/coupling on the end of a flexible conduit (13) comprising injecting a threaded portion/cuff of polyester elastomer (16) onto the conduit adjacent to the end of the conduit wherein the threaded portion/cuff (16) is attached/blended to the flexible conduit (13). Vohrer also teaches injecting the connector/coupling (15) with the same material used to form element (16) (Figure 2; col. 5, lines 3-8; col. 6, lines 20-60). The examiner notes that the inner surface of the connector/coupling (15) is integrally attached to the threaded portion/cuff (16) and the polyurethane (3) coated metal hose (2).

As to claims 8 and 9, Vohrer employs a helically wound metal hose that is electrically conductive and the metal hose is covered with a polyurethane jacket/bead (col. 5, lines 48-67).

As to claim 10, the inner threaded portion (16) formed by Vohrer extends from the connector (15) (Figure 2).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson et al. (US 3,963,856) in view of Kleykamp et al. (US 3,779,846) and Edirisuriya et al. (US 2003/0236015).

Regarding claims 6 and 7, Carlson et al. teach a method of forming a flexible plastic tubing have a conductive helical bead wherein the helical bead is extruded onto the plastic tubing and is flattened at the end section to form a flattened end portion/cuff/sleeve to accommodate a fitting/connector (Figure 1 (16); Abstract; col. 4, lines 1-63). The examiner notes that to the extent the term "injection molding" is defined and set forth in the instant disclosure the extruded molten helical bead is reasonably understood to be "injected" and "molded" onto the conduit. Carlson et al. do not teach the helical bead is a rubber material or that the connector/fitting is injection molded onto the flattened end. However, Kleykamp et al. teach that in the analogous art helical coatings for tubes are known to consist of rubber coating conductive materials (e.g. wire) (Abstract; col. 2, lines 3-8) and Edirisuriya et al. teach a method wherein the connector is injection molded to the end of the conduit (Figure 18 and Figure 22).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the teaching of Carlson et al. and to have employed a rubber material as the helical bead as suggested by Kleykamp et al. since Kleykamp et al. teach that rubber coated conductive helical beads are an equivalent alternative material known in the analogous art and to have injection molded the connector/fitting as suggested by Edirisuriya et al. since Edirisuriya et al. suggest such a method forms a strong attachment between the conduit and the connector/fitting.

As to claims 8 and 9, Carlson et al. wrap the conduit with a helical conductor that is covered with a bead (Figure 1).

As to claim 10, Carlson suggests the flattened portion extends from the connector (Figure 10).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 3,115,353 to Prevati teaches that it is known to inject rubber between the underlayer of a flexible tube and the connector (col. 1, lines 37-40).

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

Jeff Wollschlager  
Examiner  
Art Unit 1791

January 4, 2008

CY  
CHRISTINA JOHNSON  
SUPERVISORY PATENT EXAMINER